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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,607	08/05/2003	Tomoki Nobuta	NECW 20.531	6611
-050	7590 03/08/2007 CHIN ROSENMAN LLI		EXAMINER  WEINER, LAURA S  ART UNIT PAPER NUMBER  1745	INER
575 MADISON			WEINER, LAURA S	
NEW YORK, N	NY 10022-2383		ART UNIT PAPER NUMBER	
		•	1745	
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SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MOI	NTHS	03/08/2007	PAI	PER ·

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
Office Action Commons	10/634,607	NOBUTA ET AL.	_		
Office Action Summary	Examiner	Art Unit			
	Laura S. Weiner	1745			
The MAILING DATE of this communication app Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY					
WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13  - after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing  - earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNI 36(a). In no event, however, may a will apply and will expire SIX (6) MON cause the application to become Al	CATION. reply be timely filed NTHS from the mailing date of this con BANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 17 Ja	nuary 2007.				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.				
·— · · ·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under E	x parte Quayle, 1935 C.E	). 11, 453 O.G. 213.			
Disposition of Claims	·				
4) Claim(s) <u>1-5,8,10-13 and 17-25</u> is/are pending	in the application.				
4a) Of the above claim(s) is/are withdray	vn from consideration.	•			
5)⊠ Claim(s) <u>19</u> is/are allowed.					
•	Claim(s) <u>1,3,4,8,11-13,17,18 and 23-25</u> is/are rejected.				
7) Claim(s) 2,5,10 and 20-22 is/are objected to.	r election requirement				
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examine	•				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the	-, .		TD 4 404741		
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex					
· —	animor. Note the attache	a office Action of form 1	0-102.		
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C.	§ 119(a)-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents		Application No.			
· · · · · · · · · · · · · · · · · · ·	<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>				
application from the International Bureau	•	received in this Hational	olage .		
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892)		Summary (PTO-413)			
<ul> <li>2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3)  Information Disclosure Statement(s) (PTO/SB/08)</li> </ul>		(s)/Mail Date Informal Patent Application			

Paper No(s)/Mail Date \_

6) Other: \_\_\_\_.

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#### **DETAILED ACTION**

### Response to Arguments

1. Applicant's arguments with respect to claims 1, 3-4, 8, 11-13, 17-18, 23-25 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 112

2. Claims 3-4, 8, 17-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is rejected because the claim is drawn to a cell electrode so only one electrode is present and no redox reaction would result therefore the phrase "wherein only protons act as a charge carrier in a redox reaction in both electrodes associated with charge and discharge" does not further define a cell electrode and therefore does not further limit claim 1 from which the claim depends from. The claim is not drawn to a battery or a cell where there would be two electrodes present.

Claim 4 is rejected because it is unclear if the benzimidazole and its derivatives is an additional compound or further defining imidazole cited in claim 1.

Claim 8 is rejected because it does not further limit claim 1. This claim should be cancelled because it is claiming the same limitation.

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#### Claim Rejections - 35 USC § 102

3. Claims 1, 3-4, 8, 11-13, 17-18, 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Shinozaki et al. (JP 3-182051, abstract).

Shinozaki et al. teaches a battery comprising two electrodes of which at least one comprises polyaniline as the principal electrode active substance. Shinozaki et al. teaches that 2 g polyaniline [95 parts proton-conducting compound] and 0.1 g 2-mercaptobenzimidazole [(5 parts nitrogen-containing heterocyclic compound, specifically an imidazole][Thus teaching 1-80 parts by weight of the nitrogen-containing heterocyclic compound to 100 parts by weight of the active material] was mixed for the active substance. The active substance was formed on a stainless steel expanded metal to prepare the electrode.

### Allowable Subject Matter

- 4. Claims 2, 5,10, 20-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 5. Claim 19 is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S. Weiner whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 574-272-1000.

Laura S Weiner Primary Examiner Art Unit 1745

March 5, 2007